

Rolling Knolls Landfill Superfund SITE
FIELD CHANGE REQUEST (FCR) FORM

Contract No.:

REQUEST NO: 06

DATE: 04/22/2015

FCR TITLE: Monitoring Well Location and Installation Method Modification

DESCRIPTION:

The Data Gaps Sampling and Analysis Plan (Data Gaps SAP) proposed installation of seven permanent monitoring wells (MW-11 through MW-17). The Data Gaps SAP indicated the final locations of the permanent monitoring wells will be determined based on the results of the soil sampling and the temporary monitoring well samples collected as part of the data gap sampling. These data, and a proposal for the locations of the permanent monitoring wells, were transmitted to USEPA for review and approval on February 17, 2015. Additional information was transmitted to USEPA on February 27, 2015. The USEPA responded on March 5, 2015 and requested adjustments to the locations of MW-12 and MW-15. At this time the USEPA also requested the addition of three additional monitoring wells (MW-18 through MW-20).

REASON FOR DEVIATION:

Prior to installation of the monitoring wells ARCADIS personnel and a USEPA representative inspected each proposed monitoring well location. Proposed locations for MW-13, MW-14, MW-18 and MW-20 were found to be in approximately 6 to 24 inches of standing water. These locations should be moved to areas with no standing water. The initial proposed and revised locations of these wells are included on the attached figure. The approximate distance each monitoring well will be moved compared to the location approved by USEPA on March 5, 2015 is included in Table 1 and described below.

The revised locations may still be within wet areas and will not permit access and/or installation using the track mounted geoprobe and methods describe in the SAP. In accordance with the email from USEPA on March 30, 2015 alternate monitoring well installation methods are proposed below for monitoring wells that cannot be installed with a track mounted geoprobe.

RECOMMENDED MODIFICATIONS:

Monitoring well MW-13 should be moved approximately 100 feet (ft) to the northwest. This location would likely shift the monitoring well to drier ground and still achieve the objective of characterizing constituent concentrations in groundwater downgradient of soil samples SS-157 and SS-158.

Monitoring well MW-14 should be moved approximately 140 ft to the west. This location would likely shift the monitoring well to drier ground and still achieve the objective of characterizing constituent concentrations in groundwater in the vicinity of soil samples SS-135, SS-136, and SS-137.

Monitoring well MW-18 should be moved approximately 200 ft to the east. This location would likely shift the monitoring well to drier ground and still achieve the objective of characterizing constituent concentrations in groundwater downgradient of monitoring well MW-10.

Monitoring well MW-20 should be moved approximately 140 ft to the east. This location would likely shift the monitoring well to drier ground and still achieve the objective of characterizing constituent concentrations in

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groundwater in the vicinity of soil samples POI-6, POI-14, SS-144, and SS-160.

If ground conditions are such that the permanent monitoring wells cannot be installed using a track-mounted geoprobe as described in the SAP, a winch mounted on a tripod will be used. A 2-inch diameter macrocore, split-spoon sampler or other coring method will be advanced at the well location to approximately 20 ft below ground surface (bgs). The cores will be removed and logged as described in the SAP. When logging is complete an 8-inch diameter steel or PVC casing will be driven approximately 2 feet into the stable substrate underlying the wet area. This casing will act to keep the surrounding surface water out of the borehole during monitoring well installation. A hand auger, water-rotary drilling, or other means will be used to advance a 6-inch diameter borehole to the well completion depth.

The well construction methods will be similar to the SAP. The well will be constructed using 2-inch PVC screen and riser with a sand filter pack around the well screen. The screen interval may be shortened to 5 ft in length. The annular space above the sand filter pack will be filled with a bentonite/cement grout to seal out surface water. The bentonite/cement grout will extend 1 to 2 ft below the bottom of the 8-inch casing, and will fill the annular space between the 2-inch PVC pipe and the 8-inch casing. A locking protective stick up casing will be installed around the 2-inch PVC pipe.

If a permanent monitoring well cannot be installed using the method described above a temporary well point may be installed for the purpose of collecting a groundwater sample. Temporary well points will be constructed using a screen-point sampler driven into the material below the surface water. The drill rod will act as a temporary casing to keep the surrounding surface water out of the screened interval. The depth of the screen will depend on the lithology observed in the cores. A groundwater sample will be collected from this temporary point. Following sample collection, the well point will be abandoned in accordance with NJDEP regulations.

IMPACT ON PROJECT OBJECTIVES:

The revised monitoring well locations and installation methods meet the project objective of collecting representative groundwater samples to characterize constituent concentrations in groundwater.

Dated Signatures:



04/22/2015

(Field Team Leader)



04/22/2015

(Project Manager)

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